TOP SECRET

OUT59946

P 282114Z
FM NPIC

1966 SEP 28 21 49 Z

29 SEP 1966 25X1

AFSSO PACAF
AFSSO ACIC
AFSSO FTD
AFSSO USAFE
CNO
OPCEN

25X1

25X1

ZEM
T O P S E C R E T
CITE NPIC 8609.

SUBJECT: CAMERA INFORMATION FOR MISSION 1035-1.

1. THE MISSION UTILIZED TWO PAN CAMERAS, FOUR HORIZON CAMERAS, A STELLAR CAMERA, AND AN INDEX CAMERA.

2. CAMERA DATA

A. MAIN UNITS	FORWARD	AFT	STAR HOR	PORT HOR
FOCAL LENGTHS (MM)	609.602	609.602	FWD 55.00	FWD 54.96
			AFT 54.95	AFT 54.95
FILTER (WRATTEN NO)	23A	21	25	25
APERTURE	F3.5	F3.5	F8.0	F6.3
SLIT WIDTH (IN)	.225	.175	1/100	1/100
EXPOSURE (SEC)				
FILM	3404	3404	3404	3404
RESOLUTION (L/MM)	181	171	NA	NA

B. S/I UNITS	STELLAR	INDEX
FOCAL LENGTH(MM) PART 1	83.8453	38.3036

— 2 —

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                    PART 2   84.0195   38.3245

FILTER (WRATTEN NO)            NONE       21

APERTURE                       F1.8      F4.5

EXPOSURE (SEC)                 1.0      1/500

FILM                           3401      3400

RESOLUTION (L/MM) PART 1                  72

                  PART 2                  71

UNIT NUMBER       PART 1 D95/112/113

                  PART 2 D96/104/116
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3. LENS DISTORTION (PIN CUSHION) MM

A. MAIN UNITS	3	2	1	0	359	358	357
FWD UNIT	.001	.000	.000	.000	.000	.001	.003
AFT UNIT	.002	.000	.000	.000	.000	.001	.002

B. HORIZON CAMERAS (MM)

	FWD		AFT	
	PORT	STAR	PORT	STAR
(RADIAL) 10 DEGREES	.040	.020	.030	.010
20 DEGREES	.100	.070	.060	.040
(TANGENTIAL) MAX VECTOR	.025	.030	.030	.010

4. CAMERA ANGLES

		DEG.	MIN.
A. ANGLE BETWEEN PAN CAMERAS		29	53.50
B. DEPRESSION ANGLE BETWEEN	FWD STAR	14	32.7
HORIZON AND PAN CAMERAS	FWD PORT	15	38.3
	AFT STAR	15	15.8
	AFT PORT	15	05.6

+3-

C. ANGLE BETWEEN STELLAR   PART 1   89   50.2

    AND INDEX CAMERAS   PART 2   89   49.0

5. TIMING MARKS

FREQUENCY MARKS WILL APPEAR ON THE FILM AT A RATE OF 200 CYCLES PER SECOND.

6. IMAGE MOTION COMPENSATION DATA (CYCLE RATE (CPS), GROUND ANGULAR VELOCITY (GAV), AND PASSES WHERE USED).

REF. LEVEL			AMPL. LEVEL			PASSES
NO.	CPS.	GAV.	NO.	CPS.	GAV.	
8	.3223	.0291	3	.1292	.0117	1D1 THRU 4D2
7	.3381	.0306	3	.1292	.0117	6D1 THRU 9D4
8	.3223	.0291	2	.1424	.0129	14D1 THRU 70D2

7. PROGRAM TIME DATA

PASS	CAMERA ON TIME (ZULU TIME)				PROGRAM ON TIME UP RAMP	PROGRAM DURATION
	DAY	HR	MIN	SEC	SEC	SEC
1D1	20	22	43	00	1251	36
3D1	21	01	42	39	1136	46
4D1	21	03	18	26	1434	47
4D2	21	03	34	27	2395	35
5D1	21	04	47	16	1317	176
6D1	21	06	16	10	1207	314
7D1	21	07	47	20	1278	268
8AE	21	08	57	47	60	47
8D1	21	09	20	22	1414	61

8D2	21	09	26	19	1771	44
9D1	21	10	48	34	1260	45
9D2	21	10	51	59	1466	70
9D3	21	10	57	20	1786	54
9D4	21	10	59	45	1931	201
14D1	21	18	18	11	1013	44
18D1	21	21	30	37	1670	38
19D1	22	02	06	33	1895	39
21D1	22	05	00	05	1422	221
21D2	22	05	05	36	1754	110
22D1	22	06	29	15	1331	168
22D2	22	06	32	50	1546	108
23D1	22	08	02	58	1509	51
23D2	22	08	05	43	1674	140
25D1	22	11	01	40	1342	41
25D2	22	11	04	28	1511	83
25D3	22	11	08	29	1752	77
27D1	22	14	11	56	1874	84
30D1	22	18	46	59	2047	66
31D1	22	20	11	40	1688	99
32D1	22	21	34	09	1194	57
36D1	23	03	39	58	1375	69
36D2	23	03	42	19	1516	137
36D3	23	03	58	43	2501	100
37D1	23	05	12	19	1474	488
38D1	23	06	42	00	1412	70

39D1	23	08	15	45	1596	150
40D1	23	09	49	37	1786	122
41D1	23	11	15	01	1469	35
41D2	23	11	17	24	1611	70
45D1	23	17	35	06	2508	44
46D1	23	18	52	06	1689	79
47D1	23	20	23	44	1746	91
52D1	24	03	52	48	1487	226
52D2	24	04	12	03	2643	53
53D1	24	05	24	21	1540	487
54D1	24	06	56	47	1644	94
54D2	24	06	59	56	1833	95
55D1	24	08	26	41	1599	151
56D1	24	10	02	02	1881	100
57D1	24	11	29	36	1695	40
58D1	24	13	06	31	2072	81
59D1	24	14	24	31	1311	42
60D1	24	16	15	50	2551	98
63D1	24	20	35	53	1837	34
67D1	25	02	35	32	1662	47
68D1	25	04	04	11	1543	202
69D1	25	05	34	51	1545	124
69D2	25	05	38	18	1752	146
69D3	25	05	41	59	1973	147
70D1	25	07	04	50	1505	269
70D2	25	07	10	49	1864	91

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NOTE: ABOVE DATA IS FOR THE MASTER (FWD) UNIT ONLY. ADD
12 SECONDS TO OBTAIN START TIMES OF AFT UNIT.

   8. TIME CORRELATION (MILLISECONDS)

PASS	CLOCK TIME	SYSTEM TIME	DIFFERENCE
9	212341.429	37470.8893	----
16	252156.355	77285.8112	.004
24	294059.120	32788.5722	.004
31	333926.791	72656.2398	.003
40	381197.488	33526.9334	.003
47	420979.295	73308.7379	.002
55	463118.404	29047.8447	.002
63	508143.860	74073.2989	.002
71	13149.192	29549.5416	.000

NOTE: ALL "DIFFERENCE" VALUES ARE PLUS.

GP−1

T O P S E C R E T

                  −END OF MESSAGE−

S/C NOTE: ALSO PASSED   25X1